

## ATTACHMENT G

### Proposal Screening and Scoring Criteria

#### Section 1: Initial Proposal Pass/Fail Screening Criteria

<p><b>The following initial scoring criteria will be used by PIER staff to screen proposals. Applicants are required to address the below criteria below. Failure to address any of the criteria will result in the proposal not being considered for funding.</b></p>	
<p><b>1. Grant Proposal Cover Page and Instructions</b> Attachment A is complete and signed by an authorized representative.</p>	<input type="checkbox"/> <b>Pass</b> <input type="checkbox"/> <b>Fail</b>
<p><b>2. California-Based Entities</b></p> <ul style="list-style-type: none"> <li>The proposal includes a CBE as either the Recipient or a subcontractor.</li> <li>The budget reflects that CBEs will receive at least 60% of PIER funds.</li> <li>A California-Based Entity Form (Attachment H) is provided for each CBE.</li> </ul>	<input type="checkbox"/> <b>Pass</b> <input type="checkbox"/> <b>Fail</b>
<p><b>3. Economic Investment in California</b></p> <ul style="list-style-type: none"> <li>The budget provides evidence that the CBE (or one or more CBEs collectively) will spend at least 60% of PIER funds in California.</li> <li>The budget documents how PIER funds will be spent in California.</li> </ul>	<input type="checkbox"/> <b>Pass</b> <input type="checkbox"/> <b>Fail</b>
<p><b>4. Project Location for Demonstration Projects</b> The proposed demonstration project is located in an IOU Service Area.</p>	<input type="checkbox"/> <b>Pass</b> <input type="checkbox"/> <b>Fail</b>
<p><b>5. Project Completion Date March 30, 2015</b> The proposed project and all invoicing are scheduled for completion by March 30, 2015.</p>	<input type="checkbox"/> <b>Pass</b> <input type="checkbox"/> <b>Fail</b>
<p><b>6. Project Narrative</b></p> <ul style="list-style-type: none"> <li>The Project Narrative: (1) describes how the proposed project advances the science, technology, and market penetration in California of grid-connected DG, CHP and/or CCHP systems; (2) addresses technical and/or economic challenges to the development and market deployment of integrated multiple DG/CHP/CCHP technology, energy storage and/or fuel flexible systems, in diverse market applications; and (3) explains how the proposed project will benefit California electricity and/or natural gas ratepayers.</li> </ul>	<input type="checkbox"/> <b>Pass</b> <input type="checkbox"/> <b>Fail</b>

<ul style="list-style-type: none"> <li>The proposed project has not been and is not currently being funded by an Energy Commission agreement.</li> </ul>	
<b>7. Resumes and Background</b> Resumes of the Principal Investigator and key research partners emphasize experience related to activities to be performed in the proposed project.	<input type="checkbox"/> <b>Pass</b> <input type="checkbox"/> <b>Fail</b>
<b>8. Project Budget</b> The Applicant must complete and include the Budget Forms in Attachments D. <ul style="list-style-type: none"> <li>The budget provides for match funding of at least 25 percent.</li> <li>The budget information includes the match funding source(s).</li> <li>The budget identifies average loaded rates.</li> </ul>	<input type="checkbox"/> <b>Pass</b> <input type="checkbox"/> <b>Fail</b>
<b>9. Schedule of Products and Due Dates</b> Applicants must include the Schedule of Products and Due Dates template in Attachment E.	<input type="checkbox"/> <b>Pass</b> <input type="checkbox"/> <b>Fail</b>
<b>10. Acceptance of Terms and Conditions</b> The Applicant affirms the statement in Attachment A that it will abide by the PIER Grant Terms and Conditions.	<input type="checkbox"/> <b>Pass</b> <input type="checkbox"/> <b>Fail</b>
<b>11. Letters of Commitment</b> <ul style="list-style-type: none"> <li>The proposal includes a letter of commitment from each source of matching funds.</li> <li>If the proposal involves demonstration, the proposal provides one or more letters of support from a project host site.</li> <li>The proposal includes a letter of commitment from each key project partner.</li> </ul>	<input type="checkbox"/> <b>Pass</b> <input type="checkbox"/> <b>Fail</b>
<b>12. Confidential Information</b> The proposal does not contain confidential information.	<input type="checkbox"/> <b>Pass</b> <input type="checkbox"/> <b>Fail</b>
<b>13. False or Misleading Information</b> The proposal does not contain intentionally false or misleading information.	<input type="checkbox"/> <b>Pass</b> <input type="checkbox"/> <b>Fail</b>

## Section 2: Scoring Criteria

### Overview of the Technical Scoring Process

Proposal applications must fully comply with the Solicitation requirements and follow the Solicitation Guidelines to be eligible for the technical evaluation by the Technical Scoring Committee.

### Confidential Process

During the evaluation process, all proposals will be kept confidential. The entire evaluation process from receipt of proposals to the posting of the Notice of Proposed Award is confidential. However, proposals and all submittals will become public records after the Commission completes the evaluation and/or scoring process and the Notice of Proposed Awards is posted or the PON is cancelled.

Please remember, no confidential information will be accepted during the proposal and selection phase of this Solicitation. If any confidential information is submitted, the entire proposal will be rejected and will not be eligible for funding. Proposals containing confidential information will be returned to the Applicant.

### Technical Scoring Committee

Proposals that pass the initial screening according to the Solicitation requirements and guidelines will be scored by a minimum of three technical evaluators. Technical evaluators may be from academia, energy and engineering organizations, industry, or government.

### Scoring and Selection Process

Each proposal will be scored by the Technical Scoring Committee using the following process:

1. Each Committee Member will independently score each proposal from zero (0) to ten (10) for each criterion described in the next section, based upon the information provided by the Applicant's proposal.
2. Each criterion score will then be multiplied by the specified weighting factor to obtain the weighted points for that criterion.
3. The weighted points for each criterion will be summed to provide each Committee Member's score.
4. The final score for each proposal will be the average score of all Committee Members.

A minimum score of 102 out of maximum possible score of 145, which is just above 70%, will be required to pass technical evaluation and be eligible for funding. The list of passing proposals will be submitted to the full Energy Commission for funding recommendation. Recommended awards must be approved by the full Energy Commission at an Energy Commission Business Meeting.

### Scale for Scoring Criteria

Each proposal will be scored as shown in Table 2 below on the degree to which it meets each of the Technical Evaluation Criteria.

**Table 2. Scale for Scoring Criteria**

<i>Score</i>	<i>Response to the Criterion</i>
0	Not responsive
1 – 2	Response is minimal
3 – 4	Responds only marginally to relevant considerations
5 – 6	Responds satisfactorily to most relevant considerations
7 – 8	Responds satisfactorily to all relevant considerations
9	Responds completely, accurately, and convincingly to all relevant considerations
10	Response is complete, specific and superior, both quantitatively and qualitatively

**Technical Evaluation Criteria**

The Technical Scoring Committee will score each proposal based on the following Technical Evaluation Criteria:

**1. Problem Statement and Status of Technology.**

Criterion Scoring Range: 0 - 10  
 Weighting Factor: 2.0  
 Maximum Possible Points: 20

- The proposal identifies the specific barriers, knowledge gaps, and technical deficiencies of the subject technology.
- The proposal's Problem Statement is consistent with the Purpose and General Problem Statement for this Solicitation.
- The proposal describes the current status or research currently being performed in the subject technology/innovation area and how the proposed project will leverage results from previous work.
- The proposal explains how the project is unique, critically needed, and not duplicative of other efforts.
- The cost and performance of the relevant systems, materials, components, subsystems, and operational characteristics are completely, clearly, and quantitatively described and supported by calculations, experimental data and literature references.
- Past and current work in the subject technology performed by the project team, including successes and failures, are described.
- The market position of the subject technology is completely and quantitatively described.

**2. Technical Description and Approach.**

Criterion Scoring Range: 0 - 10  
 Weighting Factor: 3.0  
 Maximum Possible Points: 30

- The proposal describes how the project advances the science and addresses technical and economic issues associated with the performance and operation of hybrid generation and fuel flexible DG/CHP/CCHP systems.
- The proposal describes the technical performance (including specifications, data, and calculations) that the DG/CHP/CCHP system has or will have by a specified date, and emissions that satisfy the CARB 2007 emissions standards for Distributed Generation systems. Alternatively, the proposal describes why the CHP/CCHP system or technologies being developed in this proposal are exempt from these standards.

- The proposal demonstrates that the Applicant has a thorough understanding of the science, engineering, and manufacturing associated with the proposed DG/CHP/CCHP technologies or systems.
- The specific issue(s) or barrier(s) to the market acceptance in California of grid-connected CHP/CCHP systems that the project will address is/are clearly and completely described.
- The proposal includes a thermodynamic analysis, including discussion and graphical representation or process flow diagrams, of the CHP/CCHP system when operating at full load. The components are identified.
- The Project Description lays out an approach and plan that is practical and feasible for accomplishing the stated objectives.
- The proposal identifies where the research will be conducted and/or demonstration site, if applicable, and describes the site or facility capabilities and possible interconnection requirements if any. Demonstration site identified by Standard Industrial Classification (SIC) code if available.
- The proposal identifies the project needs of grid interconnection, if any, and provides evidence of discussion and cooperation with the local utility regarding the possibility of grid interconnection.
- The proposal demonstrates discussion and coordination with the local Air Quality Management District (AQMD) and provides local AQMD's letter of support or any state or county authorities.

**3. Cost and Technical Performance Goals.**

Criterion Scoring Range: 0 - 10

Weighting Factor: 1.5

Maximum Possible Points: 15

- The cost and technical performance improvement goals to be achieved at the end of the project are given in either absolute or percentage terms.
- The methodology to determine if the cost goals have been achieved is described.
- The methodology to determine if the technical performance goals have been achieved is described.

**4. Scope of Work, Products, and Due Dates.**

Criterion Scoring Range: 0 - 10

Weighting Factor: 1.0

Maximum Possible Points: 10

- The Scope of Work follows the template provided both in content and responsiveness.
- Technical tasks describe specifically what activities the project team will perform during the term of the project.
- The technical tasks are clearly and logically presented, with descriptive titles, appropriate and quantitative task goals and objectives, sequence of activities, and products.
- Appropriate Test Plans, demonstrating how project cost and performance goals will be achieved, are included in the tasks.
- The template for Schedule of Products and Due Dates is properly completed. The Schedule reasonably appropriates time with respect to the tasks requirements and with the time required for permitting requirements, interconnections, or pilot site agreements, if any and as appropriate.
- The project does not exceed three years in duration.

- Project tasks include coordination with local utility in cases involving demonstration.

#### **5. California Ratepayer Benefits.**

Criterion Scoring Range: 0 - 10

Weighting Factor: 1.5

Maximum Possible Points: 15

- The proposal is for a project that has not been addressed and is not currently being addressed.
- The proposal describes how the technology, hardware, or system to be developed will satisfy customer needs in ways that cannot be satisfied by currently available technologies, hardware or systems.
- Public benefits to California utility ratepayers – residential, academic, commercial, institutional and/or industrial – of a commercial product are described and quantified. Public benefits include improved fuel use efficiency, lower costs for electricity, reduced demand for petroleum based fuels, reduced emissions of criteria pollutants, more secure and reliable electricity supply, and reduced peak demand for electricity.
- The quantification of benefits is provided and is plausible, both in terms of the type and the amount, based on the ability of the project team to bring technologies to and penetrate the market.
- The proposal shows that the anticipated benefits are consistent with the cost, technological and market goals, and the commercialization path.
- Private benefits of a commercial product are described and quantified.
- The proposal shows that the project supports California energy policies and policy report recommendations, provides a basis for informing future energy policy, or develops cost and performance data for CHP systems.
- The project contributes to a balanced portfolio across technology types, levels of risk, and/or time to commercialization. (Applicants should check the PIER Annual Report for descriptions of previous and prior PIER funded projects to assess possible duplication.)

#### **6. Qualifications of Project Manager and Project Team**

Criterion Scoring Range: 0 - 10

Weighting Factor: 0.5

Maximum Possible Points: 5

- The description and substantiation demonstrates that the project team is qualified to undertake the proposed project. Accomplishments (not just activities) are described.
- The Project Manager and team members have the technical capabilities and specific experience to successfully complete the project.
- The relevant experience and specific roles of the Project Manager and key team members are described.
- The Project Manager can successfully manage the project, control cost, maintain the schedule, and report results and accomplishments in an effective manner.
- The project team has the financial, management, and technical resources to advance the technology to the next stage of development and/or commercialization.
- The proposal lists any past or planned activities related to the subject of this Solicitation, including any that may have been funded by the Energy Commission and any projects that resulted in products that were commercialized or are on a clear path to commercialization.
- The proposal includes commitment letters from the members of the project team.

**7. Market Performance Goals and Commercialization Path.**

Criterion Scoring Range: 0 - 10

Weighting Factor: 1.5

Maximum Possible Points: 15

- The system cost and performance improvement goals that need to be achieved for market introduction are given in absolute terms.
- The place of the proposed project in the commercialization path – starting with the current status of the technology, continuing through the proposed project, and concluding with additional technology advancement, manufacturing, and market development – is outlined.
- A reasonable path for commercialization of the technology is described.
- Market penetration goals or estimates are reasonable based on technical potential, economic and regulatory conditions, and the commercialization partner's existing or expected market share.
- The proposal includes a tabulation of cost and relevant performance measures anticipated at the end of the project and of baseline cost and performance measures.
- The proposal has a high probability of meeting cost and relevant performance measures at the end of the project based on the Technical Approach and the Scope of Work.
- For projects that involve demonstration, the proposal provides a discussion on operation and maintenance by either the project proponent, subcontractor, or local utility.

**8. Project Budget and Cost Effectiveness.**

Maximum Possible Points: 35

The maximum possible points that may be awarded in this criterion is 35 points. This criterion is divided into three parts: Project Budget, Average Loaded Hourly Rates, and Economic Investment in California. The maximum possible points that may be awarded under Part 1: Project Budget is 5 points. The maximum possible points that may be awarded under Part 2: Average Loaded Hourly Rates is 10 points. The maximum possible points that may be awarded under Part 3: Economic Investment in California is 20 points. The purpose of Part 2 is to maximize funds spent for research, development and demonstration projects and minimize expenditure of funds for administration and overhead costs. The purpose of Part 3 is to maximize economic investment in California by giving preference to CBEs that spend funds in California. Proposals with lower average weighted loaded rates will receive higher scores. The overall criterion point score will be the sum of the points from Parts 1, 2, and 3.

**Part 1: Project Budget**

Criterion Scoring Range: 0 - 10

Weighting Factor: 0.5

Maximum Possible Points: 5

A maximum of 5 points may be awarded in Part 1.

- The total project budget is consistent with the work to be performed and the level of expertise required.
- The PIER funding requested is reasonable and consistent with the expected level of public benefit.
- The Budget Forms are properly completed.
- Private benefits of a commercial product are described and quantified.

- The match funding provided is appropriate and consistent with the expected level of private benefits. In general, the more private benefits accrued the greater match share percentage that should be contributed towards the project.
- The sources of match funding are described and identified as in-kind or cash.
- The Budget describes the anticipated and necessary interconnection costs, if any, and identifies how this cost will be paid.
- The Budget identifies cost share by host site and local utility, if any.

## **Part 2: Average Loaded Hourly Rates**

Criterion Scoring Range: 0 - 10

Weighting Factor: 1.0

Maximum Possible Points: 10

A maximum of 10 points may be awarded in Part 2. The Average Loaded Rates (ALR) must be clearly identified in the Budget (Attachment D). Proposals with lower ALR will be scored higher. The ALR is the sum of the unloaded hourly rate/Direct Labor Rate (DL), plus Fringe Benefits (FB), plus Indirect Overhead (OH), plus General & Administrative (G&A).

Proposals will be provided with additional points based on the following formula:

*Points scored = 13 - (0.06 x ALR), where, ALR = average loaded rate in dollars/hour.*

- If ALR = \$50/hr or less, score = 10 pts
- If ALR = \$51 - 68/hr, score = 9 pts
- If ALR = \$69 - 86/hr, score = 8 pts
- If ALR = \$87 - 104/hr, score = 7 pts
- If ALR = \$105 - 122/hr, score = 6 pts
- If ALR = \$123 - 140/hr, score = 5 pts
- If ALR = \$141 - 158/hr, score = 4 pts
- If ALR = \$159 - 176/hr, score = 3 pts
- If ALR = \$177 - 199/hr, score = 2 pts
- If ALR = \$200/hr or more, score = 1 pt

## **Part 3. Economic Investment in California.**

Criterion Scoring Range: 0 - 10

Weighting Factor: 2.0

Maximum Possible Points: 20

This Solicitation is designed to maximize economic investment in California by giving preference to California Based Entities that spend funds in California. An Applicant must meet all of the following requirements to receive preference points.

A CBE is a corporation or other business entity organized for the transaction of business that:

- Has its headquarters or an office in California; AND
- Substantially manufactures the product or substantially performs the research within California that is the subject of the award.

The proposal must include a CBE as either the recipient or a subcontractor.

The proposal budget must provide evidence that, at a minimum, 60% of PIER funds will be spent in California by the CBE. The 60% applies only to PIER funds and does not include the



Applicant's matching funds. For example, if a proposal has a PIER Budget of \$1,000,000, regardless of how much matching funds are pledged, the Budget must show \$600,000 in PIER funds going to CBEs. The 60% requirement can be made up of multiple CBEs. For example, a proposal in which a recipient CBE will receive 31% of PIER funds and a subcontractor CBE will receive 29% of PIER funds meets the 60% requirement. No more than 40% of the PIER funds can be subcontracted to non-CBEs. The proposed budget must document expenditure of PIER funds in California.

The scoring for this criterion will be implemented as follows:

- 60% to 64% of PIER funds spent in California, 1 out of 10 possible points
- 65% to 68% of PIER funds spent in California, 2 out of 10 possible points
- 69% to 72% of PIER funds spent in California, 3 out of 10 possible points
- 73% to 76% of PIER funds spent in California, 4 out of 10 possible points
- 77% to 80% of PIER funds spent in California, 5 out of 10 possible points
- 81% to 84% of PIER funds spent in California, 6 out of 10 possible points
- 85% to 88% of PIER funds spent in California, 7 out of 10 possible points
- 89% to 92% of PIER funds spent in California, 8 out of 10 possible points
- 93% to 96% of PIER funds spent in California, 9 out of 10 possible points
- 97% to 100% of PIER funds spent in California, 10 out of 10 possible points